

## Organizers

VDE/VDI-Society Microelectronics,  
Microsystems- and Precision Engineering (GMM)

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### In cooperation with:

UBC Microelectronics

Dr. Uwe Behringer  
EMLC 2023 Conference Chair

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## Venue



Hilton Hotel in  
Dresden



Dresden at the  
river Elbe

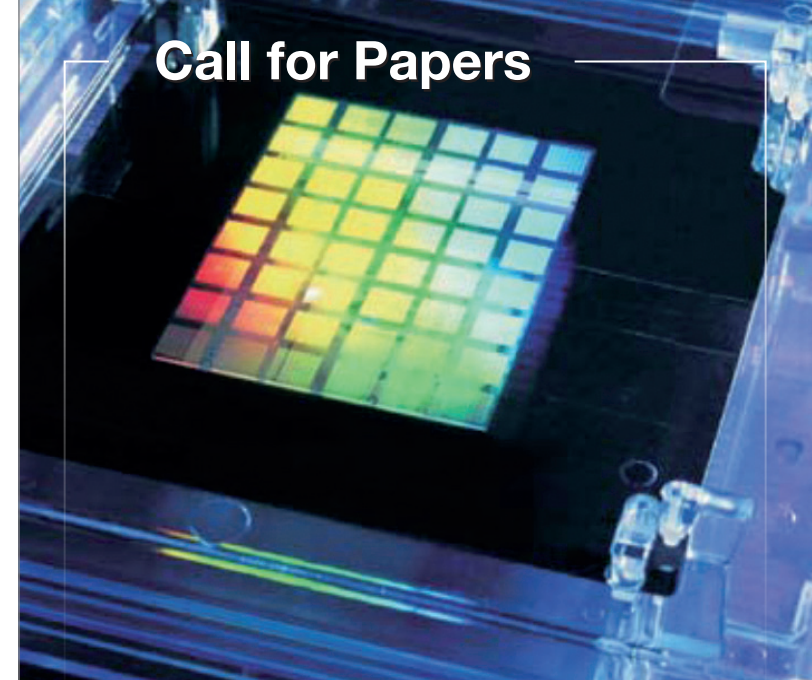
## The EMLC 2022 International Program Committee

- Conference Chairs *Behringer, Uwe*, UBC Microelectronics,  
Ammerbuch, Germany  
*Finders Jo*, ASML, Veldhoven,  
The Netherlands
- Conference Co-Chairs *Connolly, Brid*, Toppan Photomasks,  
Dresden, Germany  
*Gale, Chris*, Applied Materials,  
Dresden, Germany  
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- Program Chairs *Stolberg, Ines*, Vistec Electron Beam,  
Jena, Germany  
*Loeschner, Hans*, IMS Nanofabrication,  
Vienna, Austria  
*Erdmann, Andreas*, Fraunhofer IISB,  
Erlangen, Germany
- Program Co-Chairs *Peters, Jan Hendrik*, bmbg Consult,  
Radebeul, German  
*Sarlette, Daniel*, Infineon, Dresden,  
Germany

### Other Members

*Abboud, Frank E*, Intel Corporation, San Jose, CA, USA  
*Born, Rene*, Photonics, MZD GmbH, Dresden, Germany  
*Ehrmann, Albrecht*, Carl Zeiss SMT GmbH, Oberkochen, Germany  
*Farrar, Dave*, Hoya Corporation, London, UK  
*Galler, Reinhard*, Equicon, Jena, Germany  
*Kapilevich, Izak*, AMAT, USA  
*Le Gratiet, Bertrand*, STMicroelectronics, Crolles, France  
*Levinson, Harry J.*, HJL Lithography, Saratoga, CA, USA  
*Muehlberger, Michael*, Profactor GmbH, Steyr-Gleink, Austria  
*Pain, Laurent*, CEA-LETI, Grenoble, France  
*Ronse, Kurt*, IMEC, Leuven, Belgium  
*Savari, Serap*, Texas A&M University College Station, USA  
*Scheruebl, Thomas*, Carl Zeiss SMT GmbH, Jena, Germany  
*Schnabel, Ronald*, VDE/VDI-GMM, Offenbach am Main, Germany  
*Schulze, Steffen*, Mentor Graphics Corp., Wilsonville, OR, USA  
*Seltmann, Rolf*, Dresden Germany  
*Sundermann, Frank*, ST, Crolles, France  
*Tiron, Raluca*, CEA-Leti, Grenoble, France  
*Tschinkl, Martin*, AMTC, Dresden, Germany  
*Waelpoel, Jacques*, ASML, Veldhoven, The Netherlands  
*Wurm, Stefan*, ATICE LLC, Albany, NY, USA  
*Yoshitake, Shusuke*, NuFlare, Japan

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## Call for Papers

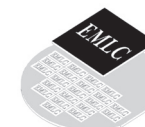
The 38<sup>th</sup> European  
Mask and Lithography  
Conference

# EMLC 2023

June 19 – 21, 2023

Hilton Hotel in Dresden, Germany

[www.emlc-conference.com](http://www.emlc-conference.com)



VDE

VDI

GMM

The VDE/VDI-Society Microelectronics, Microsystems and Precision Engineering (GMM) and UBC Microelectronics in cooperation with BACUS, PMJ, SEMI-Europe, and SPIE, are pleased to announce the

## 38<sup>th</sup> European Mask and Lithography Conference, EMLC 2023 at the Hilton Hotel in Dresden, Germany June 19<sup>th</sup> - June 21<sup>st</sup>, 2023

The focus of this 3 day conference is state-of-the-art of mask technology and lithography, such as mask manufacturing, mask business, lithography and mask applications, emerging mask & lithography technologies, and mask & lithography equipment.

This conference has annually brought together scientists, researchers, engineers and developers from around the world to present papers at the forefront of research, manufacturing and application. It provides a place where both specialists from industry and advanced research as well as equipment and software providers become acquainted with new developments and results.

### Conference Schedule

The conference will be opened at 02:00 PM on Monday, June 19<sup>th</sup>, 2023 with Tutorial and Student oral sessions, followed by a Get Together in the early evening. On Tuesday, June 20<sup>th</sup>, 2023 the conference will be continued at 09:00 AM and will close on Wednesday, June 21<sup>st</sup>, 2023, at 6:30 PM

### Technical Exhibition

On Tuesday and Wednesday (June 20<sup>th</sup> and 21<sup>st</sup> 2023) there will be a technical exhibition with booth space for about 30 exhibitors. Presentation tables and pin boards will be available. To be part of this Technical Exhibition, please return the **enclosed registration** form to the Conference Exhibition Organization as soon as possible, since exhibition space is limited.

### Exhibition Organization

Dr. Uwe Behringer, UBC Microelectronics,  
Auf den Beeten 5 Phone: +49-171-4553196  
72119 Ammerbuch Fax: +49-7073-50216  
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### Abstract Information

Abstract quality will be the basis for selection of conference presentations. The abstracts will be assessed for:

- Originality of work
- Specific results reported
- Potential impact and interest to the attendees.

Therefore, we highly recommend that your abstract contains enough detail to clearly describe the content of your presentation. We recommend an abstract length of **two pages** (including figures, diagrams, formatted text) as Word and PDF.

Commercial papers, papers with no new research/development content, and papers where significant information is missing will not be accepted.

All accepted abstracts will be printed, bound and handed out to the participants of the conference.

In order to submit your abstract to SPIE, please open the website [www.emlc-conference.com](http://www.emlc-conference.com)

### Deadline for Abstracts: , February 24<sup>th</sup> 2023

#### By submitting an abstract you agree to:

- present your work in person at the conference
- and to submit a manuscript and/or your presentation materials in time.

Authors will be notified of the acceptance of their submissions by **Friday, April 14<sup>th</sup>, 2023**; further manuscript format and layout instructions will be provided at that time.

**Please note that we plan to have oral and poster presentations.**

### Deadline for submission your Manuscripts to SPIE for the EMLC 2023 Proceedings: June 30<sup>th</sup>, 2023

All manuscripts will be subjected to a critical peer review before they are accepted for publication.

Please note that late submissions may not be published.

**Manuscripts (proceedings) will be published in the SPIE Digital Library.**

Presentation materials, submitted until July 20<sup>th</sup> 2023, will be published at the [emlc-conference.com](http://emlc-conference.com) website, protected by a pin code.

For further information concerning the submission procedure, please visit our homepage [www.emlc-conference.com](http://www.emlc-conference.com)

### Conference Topics

#### Mask Manufacturing and Mask Business

- Mask Data Preparation
- Pattern Generation: Writing, Etch, etc.
- Photomask Processes & Materials
- Metrology Tools & Technologies
- Defect Inspection & Repair
- Cleaning & Haze
- Pellicles & Mask Boxes
- Mask Process Yield & Cycle Time
- Photomasks for RET (OPC, ILT) ; PSM
- Mask Business and Management
- Mask Cost and Mask Development Strategy
- Future Mask Demand

#### Lithographic Systems and Processes

- Optical Resolution Enhancements including OPC, Free-form Illumination, Source-Mask-optimization (SMO) and Inverse Lithography Technology (ILT)
- Material-and Process driven Resolution Enhancements including Multiple Patterning and Chemical Shrinking
- Immersion Lithography including Defectivity
- Lithography Process Control
- Lithography and Etch Simulation including rigorous physical/chemical Models and Compact Models

#### Emerging Mask and Lithography Technologies

- EUV-Lithography including Masks, Materials Processes and Infrastructure.
- Directed Self-Assembly (DSA) including High Chi Materials, Defectivity Control, and new Processes
- Direct Write / Maskless Technologies including Multi-Beam Technologies
- Nano-Imprint Lithography (NIL), Soft Lithography, and Microprinting

#### Emerging Applications » NEW «

- Non-IC Applications including Si-Photonics, flat Panel Displays and MEMS
- -Lithographic Systems for non-IC Applications, including Laser Direct Write, Interference Lithography, and Mask Aligners